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2017. Ethiopia.

Health extension workers in the Simada Woreda district of the Amhara region of Ethiopia.

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A world free from malnutrition: An assessment of progress towards the global nutrition targets

KEY POINTS

- 1** At the current rate of progress, the global nutrition targets will not be achieved by 2025 globally and in most countries worldwide.
- 2** There is substantial variation in data availability and progress towards the global nutrition targets across 194 countries. Only seven countries are on course to meet four of the six maternal, infant and young child nutrition targets by 2025, while no country is 'on course' to halt the rise in adult obesity or achieve a 30% relative reduction in salt/sodium intake.
- 3** The Covid-19 pandemic is impeding progress towards achieving the global nutrition targets. An estimated additional 155 million people have been pushed into extreme poverty globally, while people with diet-related chronic diseases experience worse Covid-19 outcomes.

Introduction

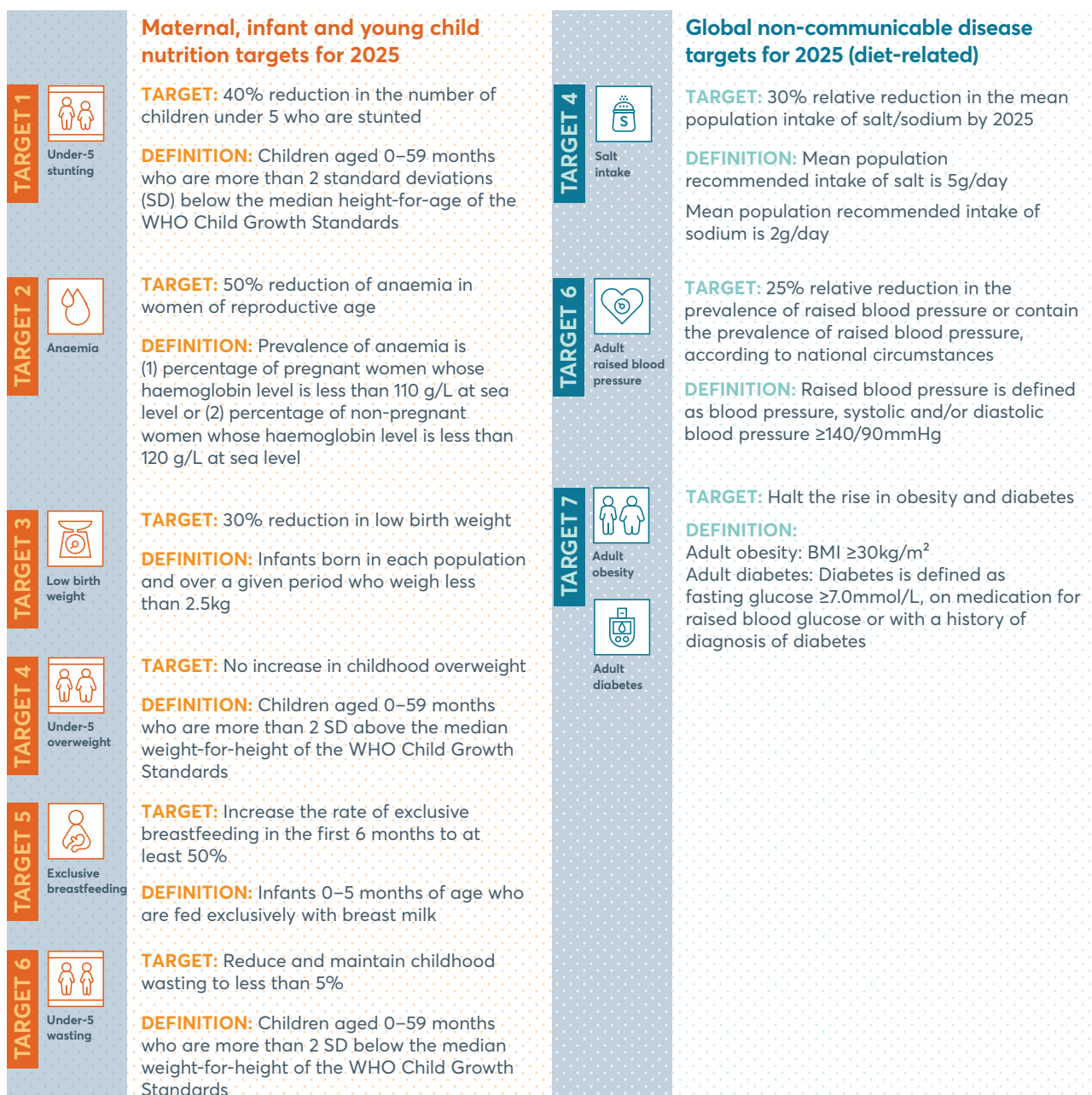
A crucial function of the Global Nutrition Report is to provide an overview of how malnutrition in all its forms is evolving, what progress is being made at the global, regional, and national levels, and which challenges require urgent action, using the most up-to-date data.

Malnutrition in all its forms is the leading cause of poor health globally.¹ Just four years remain for achieving the six maternal, infant and young child nutrition (MIYCN) targets² – stunting, wasting, anaemia, low birth weight (LBW), childhood overweight, exclusive breastfeeding – and the three diet-related non-communicable disease (NCD) voluntary targets³ – adult obesity and diabetes,⁴ raised blood pressure, and salt/sodium intake. It is essential to evaluate past and current progress

to inform key stakeholders and support decision-making on additional steps needed to close any existing gaps and ensure progress towards a world free of malnutrition in all its forms. This year, more than ever, and given that 2021 has been endorsed as the Nutrition Year of Action,⁵ it is critical to take strong nutrition action and monitor how that has translated into impact through the Nutrition Accountability Framework.⁶ The ongoing Covid-19 pandemic is impeding the achievement of the global nutrition targets as well as Sustainable Development Goal Targets 2.1 and 2.2.^{7,8,9} Short- and long-term responses are urgently needed to avoid losing the progress made so far and to bring the world back on track (Box 1.1 and Box 2.2).

This chapter reports on progress made towards the global nutrition targets and evaluates their achievability by 2025 (Figure 1.1).

FIGURE 1.1
2025 Global nutrition targets and definitions



Source: For more information see <https://apps.who.int/nutrition/global-target-2025/en/>¹⁰ and www.who.int/publications/i/item/9789241506236.¹¹

Note: Additional and disaggregated country-level information is available on the Global Nutrition Report website under the Country Nutrition Profiles.¹²
BMI = body mass index.

A world free from malnutrition

The 2020 *Global Nutrition Report* highlighted that progress made to tackle malnutrition in all its forms was too slow.¹³ New data confirms that, despite some achievements and partial success, the current pace of change is too slow to achieve the targets by 2025 in the great majority of countries.

The global view

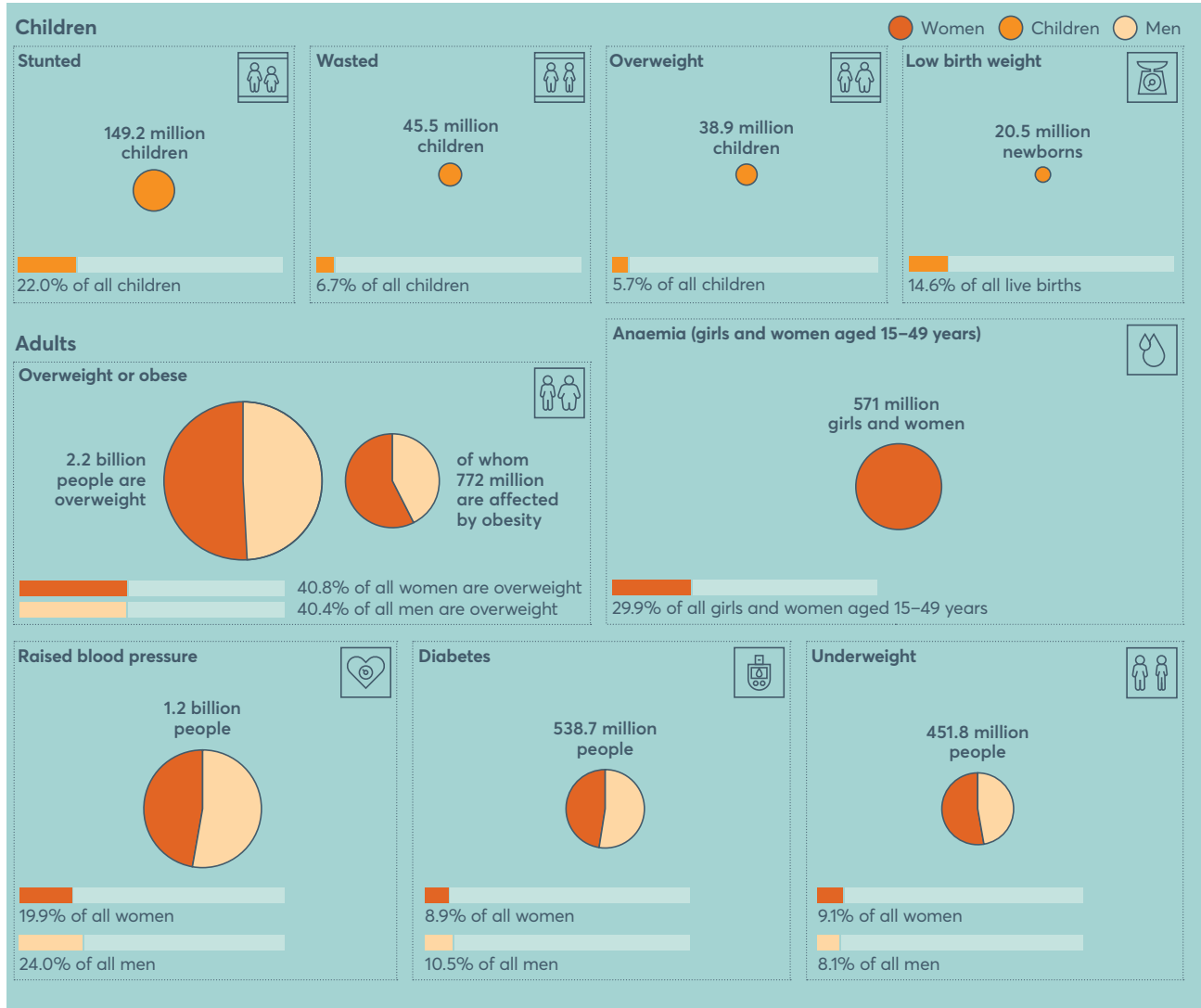
The most recent data continues to show that an unacceptably large number of people are still affected by malnutrition. Globally, 20.5 million newborns (14.6% of all live births) have a low weight at birth. Of all children under 5 years of age, one in five are stunted (149.2 million), 45.4 million (6.7%) are wasted, and 38.9 million (5.7%) are overweight. Meanwhile, 2.2 billion adults are overweight or obese (40.8% of women and 40.4% of men), 570.8 million (29.9%) girls and women of reproductive age (15–49 years) are anaemic, 538.7 million (8.9% of women and 10.5% of men) people have diabetes, and 1.2 billion (19.9% of women and 24% of men) experience raised blood pressure (Figure 1.2).

The world is off course to meet five of the six MIYCN targets and all three diet-related NCD voluntary targets (Figure 1.3).¹⁴ While achieving a prevalence of 50% or more for infants being exclusively breastfed through the first 6 months of life is achievable by 2025, progress observed so far remains limited. Great acceleration in progress is needed for all the nutrition targets. Current progress in prevalence of LBW and wasting and in the number of children under 5 years of age who are stunted is insufficient to meet the 2025 target. By 2025, the number of stunted children is estimated to be 131 million (27 million above the expected 40% reduction in the target number of stunted children), while the prevalence of wasting will remain well above the 5% target. Prevalence of anaemia among girls and women of reproductive age remains worrying: not only has there been no progress toward lowering prevalence but, on the contrary, by 2025 the increased prevalence observed over recent years will lead to a prevalence of more than double the agreed target level (31.2% instead of 14.3%). Child overweight is also on the rise, as is the prevalence of adult obesity (12.3% among men and 16.2% among women, compared with 9.2% and 13.2% in 2010). Similarly, diabetes and raised blood pressure are both off course. The mean daily population intake of sodium increased from 2.87 grams in 2010 to 2.89 grams in 2018.

FIGURE 1.2

Too many people worldwide are malnourished

Numbers of people with different forms of malnutrition worldwide, last available year



Source: UNICEF global databases Infant and Young Child Feeding (last available year at time of writing was 2019), UNICEF/WHO/World Bank Group: Joint child malnutrition estimates (last available year 2020), NCD Risk Factor Collaboration (last available year 2019 projections), WHO Global Health Observatory (last available year 2015).

Note: Adult overweight, obesity, diabetes and raised blood pressure data refers to people aged 18 years and older. Obese is a subcategory of overweight.

FIGURE 1.3

The world is off-course to meet five of the six MIYCN targets and all the diet-related NCD voluntary targets
Global progress towards the 2025 global nutrition targets



Source: UNICEF global databases Infant and Young Child Feeding (last available year 2019), UNICEF/WHO/World Bank Group: Joint child malnutrition estimates (last available year 2020), NCD Risk Factor Collaboration (last available year 2019 projections), WHO Global Health Observatory (last available year 2015), Global Dietary Database (last available year 2018).

Note: Adult overweight, obesity, diabetes and raised blood pressure data refers to people aged 18 years and older.

Missing actions to tackle malnutrition

While one of the priorities of the Global Nutrition Report is to monitor progress towards the global nutrition targets, these targets currently do not explicitly address poor diets (with the exception of salt/sodium) as the underlying cause of malnutrition in all its forms, including undernutrition and diet-related obesity and non-communicable diseases (NCDs) – the ‘double burden’. New analyses presented in this report reveal that poor diets among adults account for over 281 million years of life lost (YLLs) and more than 12 million avoidable deaths in 2018 (Chapter 2). We now understand several key dietary priorities for improving diet and health, beyond micronutrient deficiencies and hunger or excess weight, that should be highlighted, targeted and tracked in order to tackle malnutrition to its full extent.

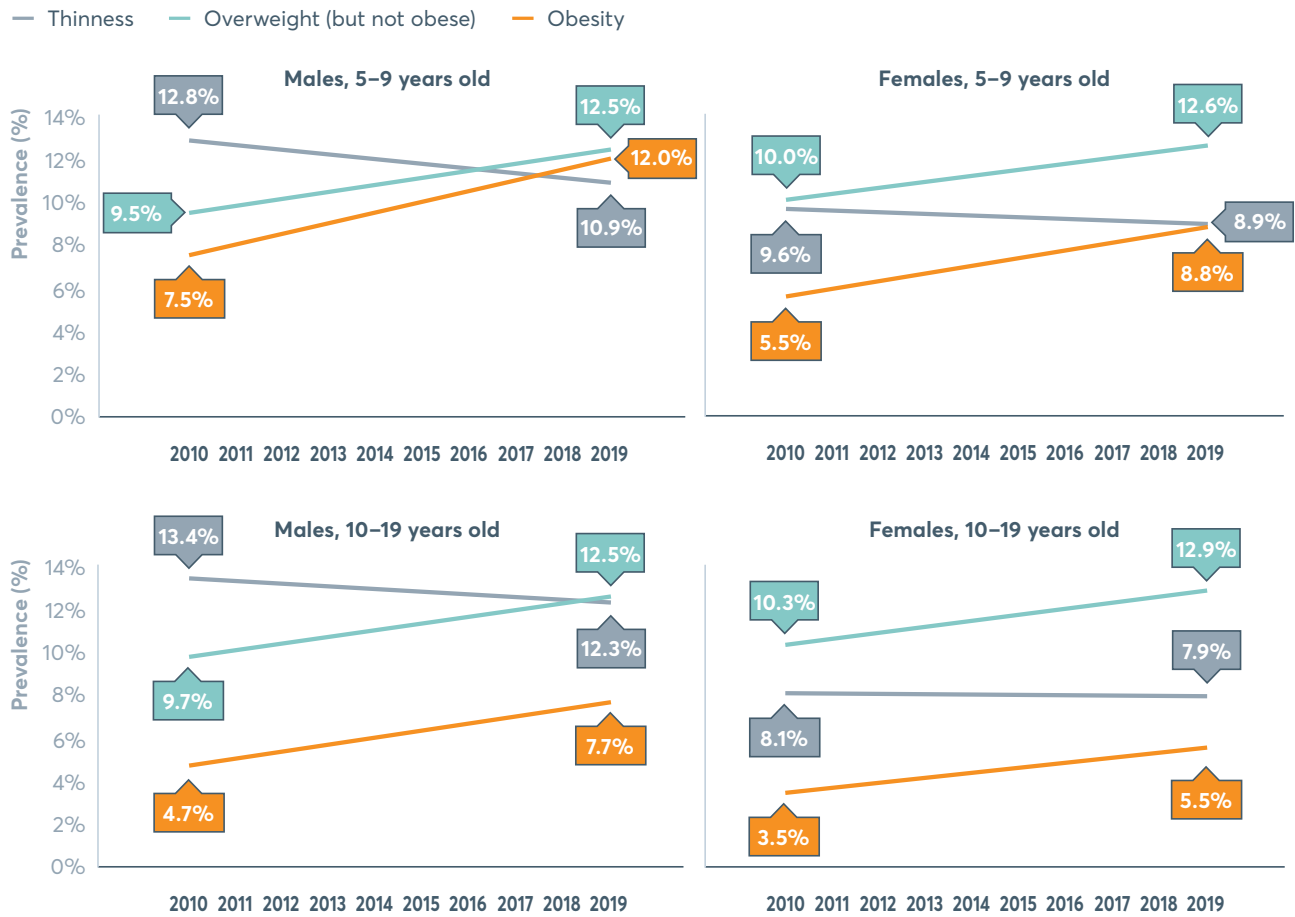
Similarly, current global targets do not explicitly capture important age groups, mainly children and adolescents (aged 5–19 years), despite representing key groups of the population that are particularly burdened by poor diets and resulting malnutrition. Prevalence of overweight¹⁵ (including obesity) in children and adolescents has increased worldwide, from 17.0% among boys and 15.5% among girls aged 5–9 years, and 14.4% and 13.8% respectively among adolescents (aged 10–19 years) in 2010 to 24.5% (male) and 21.4% (female) among children and 20.2% (male) and 18.4% (female) among adolescents in 2019. The 2019 data shows that global prevalence of thinness¹⁶ among both children and adolescents has declined modestly since 2010, from 12.8% to 10.9% among boys and 9.6% to 8.9% among girls (aged 5–9 years) and from 13.4% to 12.3% among male adolescents and from 8.1% to 7.9% among female adolescents (aged 10–19 years) (Figure 1.4).

The lack of population-based data on biomarkers of micronutrient status is also hindering monitoring of micronutrient deficiencies, despite their importance for health and development. A recent review concluded that information for most micronutrient status biomarkers is scarce and often outdated.¹⁷ Despite this scarcity of data, limited data available indicates that micronutrient deficiencies remain common, reflecting poor dietary quality. The 2021 Lancet series on maternal and child undernutrition for example suggests high prevalence of vitamin A deficiency in Africa and south Asia, and that almost half of all children in the few countries with data are affected by zinc deficiency.¹⁸ Similarly, about 60% of children under 5 years of age in low- and middle-income countries are anaemic (with higher rates among those aged 6–24 months), with little change over the past decade.¹⁹

FIGURE 1.4

Overweight and obesity prevalence in children and adolescents has increased worldwide with no appreciable changes in the prevalence of thinness

Trends in age-standardised prevalence in BMI categories in children and adolescents (2010–2019), boys and girls



Source: NCD Risk Factor Collaboration (2010–2016 estimates, 2017–2019 projections).

Notes: Prevalence (%) estimates are based on modelled age-standardised estimates for children and adolescents aged 5–19 years up to 2016 and projected between 2017 and 2019 using the WHO standard population. Thinness is defined as below minus two standard deviation (<-2 SD) from the median BMI-for-age of the WHO growth reference, overweight (but not obese) as above one standard deviation (>+1 SD) and equal to or below two standard deviations (≤+2 SD), and obesity as above two standard deviations (>+2 SD). For additional information see www.who.int/tools/growth-reference-data-for-5to19-years/indicators/bmi-for-age.

Call for action to close the gap in countries' progress

Based on the assessment of individual countries, progress over past years is insufficient to achieve the global nutrition targets by 2025 in nearly all countries (Figure 1.5a). Data for 194 countries shows substantial variation in terms of data availability, quality and progress towards the global nutrition targets (Figure 1.5b).²⁰ Anaemia levels are showing no progress or worsening in 161 countries, with only Guatemala on course to meet the target. The latest data shows 15 countries (12 in Europe and 3 in Asia), on course for the LBW target, 35 for exclusive breastfeeding, 53 for stunting, 57 for wasting and 105 for childhood overweight. Insufficient data is available to assess progress in achieving targets for exclusive breastfeeding in 98 countries, wasting in 94 countries, LBW in 48 countries, and stunting and childhood overweight in 39 countries, which prevents these countries from assessing their progress. The only countries on course for four out of the six MIYCN targets are Kenya, Eswatini, Armenia, El Salvador (childhood overweight, stunting, wasting, and exclusive breastfeeding) Kazakhstan, Turkmenistan, and Albania (childhood overweight, stunting, wasting, and low birth weight).

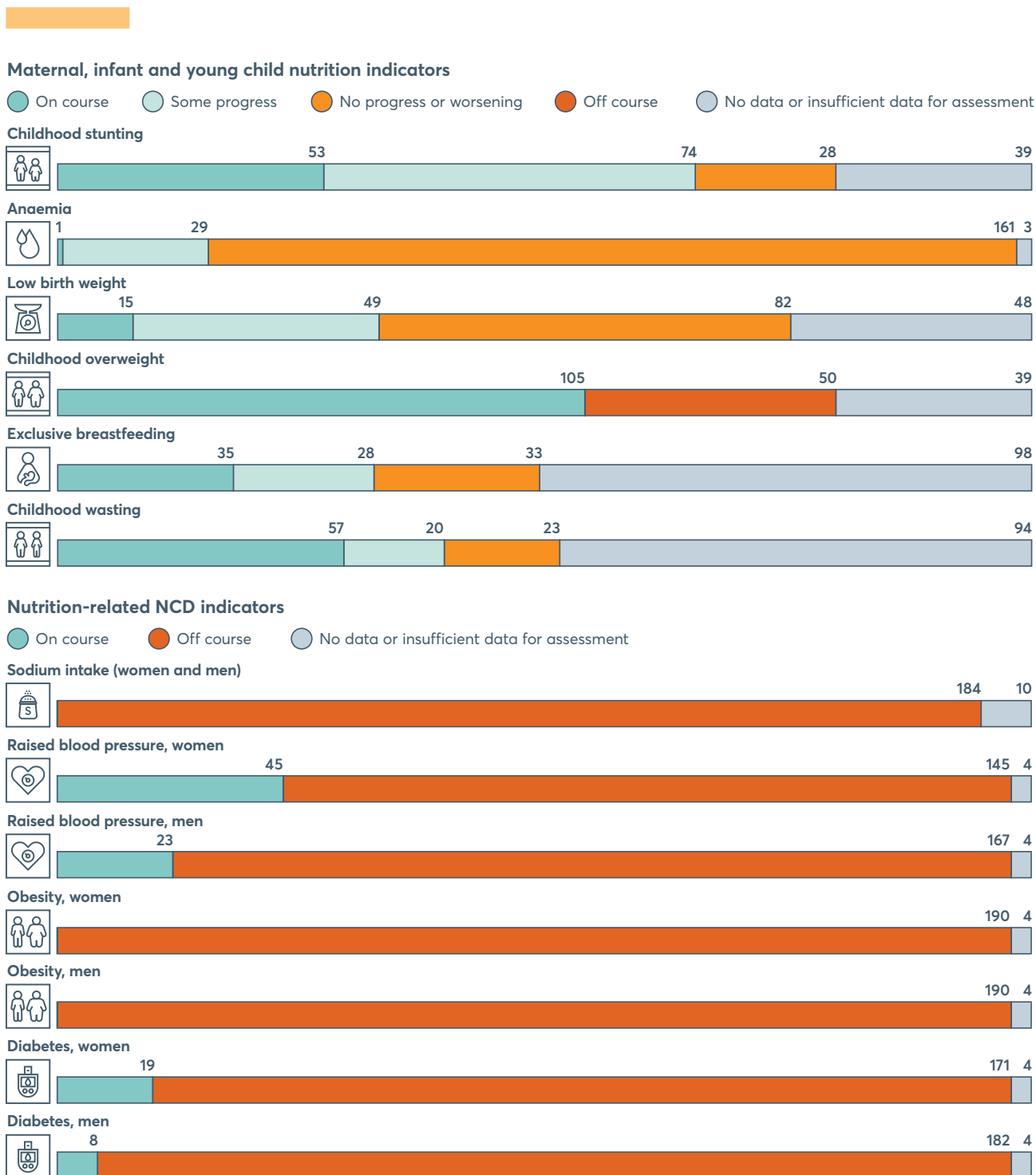
A second major concern emerging from this review is that no country is on course to halt the rise in adult obesity, or to achieve 30% relative reduction in mean population intake of salt/sodium. Seven countries (all in Europe with the exception of Australia) are on course to meet the diabetes target and 23 (15 in Europe, 4 in Asia, 2 in Oceania, 1 in North America and 1 in South America) to meet the target of 25% relative reduction of raised blood pressure for both men and women. Only six high-income Western nations (Australia, Denmark, Finland, the Netherlands, Norway and Sweden) are on course to meet both the diabetes and raised blood pressure targets (for both men and women). More countries, but still a small minority, are on course to meet the targets, for women only, on diabetes (19 countries – 16 in Europe and 3 in Asia) and raised blood pressure (45 countries, mostly in Asia and Europe). No country in the African region is on course for any of the diet-related NCD targets. Oman is among the countries lagging most in progress towards the global nutrition targets, with no progress or worsening for all targets (with the exception of raised blood pressure for women); followed by Ecuador (on course for wasting only and no assessment available for exclusive breastfeeding) and Trinidad and Tobago (with no assessment available for wasting and exclusive breastfeeding).

Yet, progress made at country level may be hiding opposing trends in specific subgroups of the population; for example, emerging data suggests that rates of breastfeeding are declining in urban settings.²¹

FIGURE 1.5A

Few countries worldwide are on course to meet the global nutrition targets by 2025

Country-level progress towards the 2025 global nutrition targets, by indicator



Source: UNICEF global databases Infant and Young Child Feeding (last available year 2019), UNICEF/WHO/World Bank Group: Joint child malnutrition estimates (last available year 2020), NCD Risk Factor Collaboration (last available year 2019 projections), WHO Global Health Observatory (last available year 2015), Global Dietary Database (last available year 2018).

Notes: Data availability and methodology differ between targets. Data for the MIYCN indicators, excluding anaemia and low birth weight, is based on surveys that mostly cover low-income and lower-middle-income countries, thus no data is available for the higher-middle- and high-income countries. Data for anaemia, low birth weight and all the NCD indicators is available for all countries, but based on modelled estimates and age-standardised using the WHO standard population, which may differ from national surveys.

BOX 1.1

The urgent need for actions to mitigate the impact of Covid-19 on maternal and child undernutrition

Saskia Osendarp

Without strong nutrition actions by nations, the Covid-19 pandemic is expected to have widespread short- and long-term implications for maternal and child undernutrition (stunting, wasting, anaemia). Covid-19 has pushed an estimated additional 155 million people into extreme poverty globally, and it is projected that around 118 million more people were facing hunger in 2020 than in 2019, because of Covid-19 in combination with persistent conflicts and climate change.²² These challenges are compounded by generally fewer, rather than more, nutrition-specific interventions. UNICEF reported an overall reduction of 40% in the coverage of essential nutrition services over 2020.

With challenges of Covid-19 limiting the collection of data on the full impact of the pandemic on maternal and child undernutrition, we rely on research based on modelled scenarios for insights. The Standing Together for Nutrition (ST4N) consortium used a combination of modelling tools to estimate the joint effects of economic, food and health systems disruptions induced by the pandemic on various forms of maternal and child undernutrition in 118 low- and middle-income countries. Projections were made for three years – 2020, 2021 and 2022 – according to three different scenarios of how the pandemic, mitigation efforts and economic forecasts might unfold.²³

Given the acceleration of the pandemic in many low- and middle-income countries in 2021, if no new actions are taken, the real impact may be closer to the most pessimistic scenario, with the possibility of a total 13.6 million more children affected by wasting (moderate, 9.3 million; optimistic, 6.4 million), 3.6 million more stunted children (moderate, 2.6 million; optimistic, 1.5 million), and 283,000 more related child deaths (moderate, 168,000; optimistic, 47,000) by 2022. An additional 4.8 million maternal anaemia cases (moderate, 2.1 million; optimistic, 1.0 million) and 3.0 million more babies born to women with low BMI (moderate, 2.1 million; optimistic, 1.4 million) are projected by 2022.

The results of the ST4N model for 118 countries were extrapolated to estimate the potential impact if all 135 low- and middle-income countries experienced similar relative increases in undernutrition. For child wasting, under the pessimistic scenario, this extrapolation predicts that an additional 16.3 million children (11.2 million children in the moderate scenario) would be affected by wasting from 2020 to 2022. For child stunting, under the pessimistic scenario, the 2021 *State of food security and nutrition in the world* (SOFI) report estimates predicted 4.5 million more stunted children (3.4 million in the moderate scenario) in 2022.²⁴

BOX 1.2

Interlinked effects of the Covid-19 and obesity pandemics highlights once again the need to improve nutrition worldwide Dariush Mozaffarian

Across diverse nations, diet-related chronic cardiometabolic diseases are the top risk factors, outside age, for increased Covid-19 severity, including risk of hospitalisation and death.^{25,26,27,28,29,30,31,32,33,34} In China, for example, high blood pressure, cardiovascular diseases and diabetes were each two to three times more common among severe than non-severe cases of Covid-19.³⁵ In the US, a 35-year old with one or more diet-related cardiometabolic diseases had a risk of Covid-19 hospitalisation similar to that of a 75-year-old with none of these conditions: a dramatic 'biologic aging' effect of poor metabolic health.³⁶ In sum, 63.5% of Covid-19 hospitalisations in the US were estimated to be attributable to four cardiometabolic conditions, with the largest proportion due to obesity (30.2%).³⁷ Diet-related chronic diseases are associated with diminished innate and adaptive immune responses.^{38,39,40,41} Furthermore, Covid-19 affects not just the lungs but also vascular endothelial cells, causing focal and systematic inflammation.⁴² Diet-related cardiometabolic conditions share a foundational pathophysiology of endothelial dysfunction and chronic inflammation.^{43,44,45} In sum, Covid-19 can be considered a 'fast on slow pandemic', with the fast pandemic of the virus superimposed on the slower, but no less devastating, global pandemic of obesity and type 2 diabetes over the past 30 years. Finally, not only does poor metabolic health contribute to Covid-19 severity, but emerging evidence indicates that nutrition insecurity caused by the pandemic has contributed to poor eating and unhealthy weight gain.⁴⁶ These interlinkages with Covid-19 highlight the major societal burdens and reduced population resilience from diet-related chronic diseases.

Conclusion

Progress made so far by most countries worldwide to tackle malnutrition in all its forms is insufficient to meet the global nutrition targets by 2025. Globally, around 149.2 million children under 5 years of age are stunted, 45.4 million are wasted, and 38.9 million are overweight; 570.8 million girls and women of reproductive age are anaemic. A staggering 2.2 billion adults are overweight or obese, 1.2 billion suffer from raised blood pressure, and 538.7 million from diabetes. Only seven countries are on course for four of the six MIYCN targets, while no country is on course to halt the rise in adult obesity and reduce salt/sodium intake. Only six countries (all high-income) are on course for the target on reducing high blood pressure and to halt diabetes. Over the past two years, the Covid-19 pandemic has posed unprecedented challenges to the global effort to tackle malnutrition in all

its forms, and its direct and indirect impacts have not fully unfolded. Around 118 million more people faced hunger in 2020 than in 2019, while up to 13.6 million more children under five are projected to become wasted by 2022 because of Covid-19 in combination with persistent conflicts, climate change and reduction in essential nutrition services' coverage. At the same time, the increased Covid-19 severity among people with diet-related chronic cardiometabolic diseases highlights once again the need to improve nutrition worldwide. The lack of data hinders assessment of progress, while the lack of explicit targeting on diets hinders tackling malnutrition to its full extent. Short- and long-term responses are urgently needed to avoid losing the progress made so far and bring the world back on track. Being the Nutrition Year of Action, 2021 represents a turning point for nutrition and a critical moment for all stakeholders to make strong commitments to win the fight against poor diets and malnutrition in all its forms.

KEY RECOMMENDATIONS

- ▶ **Progress made to tackle malnutrition in all its forms is not enough to meet the global nutrition targets by 2025. We now need strong nutrition action that should be supported by a comprehensive framework for accountability.**

There is an urgent need for all stakeholders to step up efforts and take nutrition action to win the fight against poor diets and malnutrition in all its forms. The Nutrition Accountability Framework has been set up by the Global Nutrition Report to set SMART requirements for monitor nutrition commitments and measure how they translate into impact.

- ▶ **To monitor and assess progress in the fight against poor diets and malnutrition, we need higher-quality, comparable data in most countries.**

The Global Nutrition Report is re-stating the need for better and more granular data collected by countries to inform national and local actions. This is even more critical in light of the impact of the Covid-19 pandemic on nutrition. We need short- and long-term responses urgently, to avoid losing progress made so far and to bring countries back on track.

- ▶ **Given the critical role of diets in tackling malnutrition in all its forms, global nutrition targeting should be expanded to monitor key targets for improving diets and health that extend micronutrient deficiencies, hunger or excess weight.**

There is an urgent need for international bodies, countries and all key stakeholders to recognise, target, and track poor diets in order to ensure accelerated progress in tackling malnutrition in all its forms.

NOTES

Chapter 1

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- 3 Noncommunicable Diseases Global Monitoring Framework: indicator definitions and specifications (www.who.int/nmh/ncd-tools/indicators/GMF_Indicator_Definitions_Version_NOV2014.pdf).
- 4 As the diet-related NCD Target 7 includes both obesity and diabetes, the GNR assesses progress for these indicators separately. Progress is therefore assessed for a total of 10 indicators and 9 targets. In the text we refer to 9 targets and/or 10 indicators.
- 5 Read more about the Nutrition Year of Action at: www.nutritionforgrowth.org/nutrition-year-of-action-launch-event-recap/
- 6 The Nutrition Accountability Framework (NAF) comes with a wealth of guidance and information to support SMART commitment-making by all stakeholders including governments, donors, civil society organisations, businesses and others. It helps inform, shape and inspire strong commitments for nutrition through comprehensive methods for qualifying, classifying and reporting on nutrition action, and monitoring how action translates to impact. This is facilitated through the NAF enabling transparent and accessible sharing of data, evidence and best practice. Available at: www.globalnutritionreport.org/resources/naf/
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- 14 See the Methodology. Available at: www.globalnutritionreport.org/resources/nutrition-profiles/methodology/
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